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10/807,488	03/23/2004	Ronald P. Swanson	58696US002	3060

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EXAMINER

WOLLSCHLAGER, JEFFREY MICHAEL

ART UNIT	PAPER NUMBER
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1732

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/21/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/807,488

Applicant(s)

SWANSON, RONALD P.

Examiner

Jeff Wollschlager

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 1-15 and 21-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

Applicant's amendment to the claims and specification filed October 16, 2006 has been entered. Claims 16-19 are currently amended. Claims 1-23 are pending. Claims 16-20 are currently under examination. The objection to the specification is withdrawn.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claim 16 is provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 13 of copending Application No. 10/806,957. Although the conflicting claims are not identical, they are not patentably

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distinct from each other. Claim 13 of copending application '957 claims a process for flexing a web wherein implicitly there is no contact with the second side of the web. Claim 13 does not claim creating a signal and controlling the radius based on the signal. However, it would have been obvious to one having ordinary skill in the art of decurling a web of material to control the radius of the web, for example, by adjusting the gap between the assemblies as a function of the position of the radiused web, as is routinely practiced in the art.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 16, the limiting effect of the recitation, "position of the radiused section" is unclear. It is unclear what reference point is utilized to determine the position of the radiused section. For example, the position could be the location/depth of the web within the rotating members or the position could be a function of the web relative to its roll diameter and/or the machine direction. For the purposes of examination, these reasonable interpretations are considered appropriate.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16, 17, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Okubo et al. (JP 63171755; published July 15, 1988, translation provided by applicant in REMARKS filed October 16, 2006).

Regarding claim 16, Okubo et al. teach a method of decurling a web by inducing a plastic deformation in the web comprising: creating a web path wherein a first portion passes along a first rotating member (Figure 8, elements (7) and (9)), a second portion includes a radiused section having an effective radius (Figure 8, elements (f'), (h')), and a third portion passes over a second rotating member (Figure 8, elements (8) and (10)). The rotating members taught by Okubo are co-rotating (Figure 8, elements (7) and (8) are rotating counterclockwise). A plastic strain is introduced in the web when the web passes through the second portion in order to decurl the sheet being fed through the second portion. As shown in Figure 3, the web of material is in contact with rollers (7) and (8) after and before, respectively, being in contact with nip rollers (9) and (10), respectively. As such, there is no contact with the web on the second side of the web along the claimed first, second and third portions of web path.

Additionally, Okubo et al. utilize a device that detects the diameter of the wound roll (page 2, scope of claims (2); page 3, 4th full paragraph; page 4, 1st full paragraph;

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page 7, 1st and 3rd full paragraph; page 7, last full paragraph – page 8) and adjust the gap between the rollers as a function of this measurement to remove more or less curl from the web of material.

As to claim 17, Okubo et al. teach the first portion passes along a first roller and the third portion passes along a second roller (Figure 8, Abstract).

As to claims 19 and 20, Okubo et al. teach varying the gap between the rollers according to the intensity of the curling as a function of the travel in the machine direction by measuring the roll diameter and adjusting the gap accordingly as that section of the web enters the decurling apparatus (page 2, scope of claims (2); page 3, 4th full paragraph; page 4, 1st full paragraph; page 7, 1st and 3rd full paragraph; page 7, last full paragraph – page 8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being obvious over Brandes (U.S. Patent 4,190,245; issued February 26, 1980) in view of Lewis Jr. et al. (U.S. Patent 4,322,802) or Carstedt (U.S. Patent 4,060,236).

Regarding claim 16, Brandes teaches a method of decurling a web by inducing a plastic deformation in the web comprising: creating a web path wherein a first portion

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passes along a first rotating member (Figure 4, elements (P), (C), (16a)), a second portion includes a radiused section having an effective radius (Figure 4, element (B)), and a third portion passes over a second rotating member (Figure 4, elements (S), (G), (K), and (15)). The rotating members taught by Brandes are co-rotating (Figure 1, element (15) and (16); col. 3, lines 23-27). A plastic strain is introduced in the web when the web passes through the second portion in order to decurl the sheet being fed through the second portion (col. 1, lines 30-36) and there is no contact with the web along the defined first, second, and third portions of the claimed web path.

Additionally, Brandes provides an adjustable regulator for adjusting the amount of vacuum applied to the web (col. 2, lines 42-45; col. 4, lines 1-11). Brandes does not expressly teach creating a signal based on the position of the radiused section of the web or the measured radius of the web and controlling the effective radius based upon this signal.

However, Carstedt (Abstract; col. 1, lines 64-col. 2, lines 9; col. 4, lines 49-60); col. 5, lines 65-col. 6, lines 3) and Lewis Jr. et al. (Abstract; col. 1, lines 22-57; col. 2, lines 5-22; col. 3, lines 50-67; col. 4, lines 18-30) individually teach and suggest creating a signal based on the position of the radiused section of the web by tracking the position of the radiused section of the web.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art at the time of the claimed invention to employ the method of controlling the effective radius of a web disclosed individually by Lewis Jr. et al. and Carstedt, while practicing the method disclosed by Brandes for the purpose, as taught by Lewis Jr. et

al. of providing a means of controlling the curl as a function of the longitudinal displacement of the web (col. 1, lines 22-57; col. 2, lines 5-22) and for the purpose as taught by Carstedt of being able to adjust the operating parameters as a function of varying operating conditions (col. 1, line 64 - col. 2, line 8).

As to claim 17, Brandes teaches that the first portion passes along a first roller and the third portion passes along a second roller (Figure 4, elements (15), (16a)).

As to claim 19, Brandes varies the radius of the web as it passes through the second portion of the web path with a vacuum regulator (col. 4, lines 8-11) and Lewis Jr. et al. teach setting these values to predetermined levels (col. 2, lines 5-12).

As to claim 20, Lewis Jr. et al. (Abstract; col. 1, lines 22-57; col. 2, lines 5-22; col. 3, lines 50-67; col. 4, lines 18-30) teach controlling the radiused section of the web as a function of the longitudinal displacement of the web in the machine direction.

Claim 18 is rejected under 35 U.S.C. 102(b) as being anticipated by Brandes (U.S. Patent 4,190,245; issued February 26, 1980) in view of Lewis Jr. et al. (U.S. Patent 4,322,802) or Carstedt (U.S. Patent 4,060,236), as applied to claims 16, 17, 19 and 20 above, and further in view of Crowley et al. (U.S. 6,626,343).

As to claim 18, Brandes teaches employment of rollers (Figure 4, elements (15) and (16a)) and a conveyor as part of the third portion and feeding the web from a press (Figure 4, (K), (P)). Brandes does not teach that belts may be employed to replace the rollers. However, Crowley et al. (col. 8, lines 16-21) analogously disclose that rollers and belts are equivalents that are readily employed and interchangeable in the art.

Therefore it would have been *prima facie* obvious to one having ordinary skill in the art to employ an art recognized equivalent means, such as belts, to replace the rollers utilized by Brandes to practice the method of Brandes, as is routinely practiced in the art.

Response to Arguments

Applicant's arguments filed October 16, 2006 with respect to the rejections over Brandes and Mogensen have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments filed October 16, 2006 with respect to the rejections over Okubo have been fully considered but they are not persuasive.

Applicant's arguments appear to be on the following grounds:

1. Okubo is directed to a sheet handling mechanism, not a web.
2. Okubo lack any teaching or suggestion of there being no contact on one side of the web through the defined web path.
3. Okubo is silent on creating a signal as claimed and controlling the effective radius based on the signal.

Applicant's arguments are not persuasive for the following reasons:

1. Okubo employs a process for removing the curl from a web of material. The examiner acknowledges that the web employed by Okubo is cut into discrete lengths prior to removing the curl as explained by applicant in the REMARKS filed October 16, 2006. However, the claim does not require the web be a continuous, uncut material of

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indeterminate length. As such, the cut web utilized by Okubo meets the limitation of the claims.

2. The examiner acknowledges that Okubo employs nip rollers 9 and 10. The examiner also notes that applicant employs holding means (140) for holding the web against the co-rotating members. Observing Figure 3 in Okubo, the web of material is in contact with rollers (7) and (8) after and before, respectively, being in contact with nip rollers (9) and (10), respectively. As such, Okubo does not contact the one side of the web through the defined web path, as currently claimed.

3. Okubo utilizes a device that detects the diameter of the wound roll (page 2, scope of claims (2); page 3, 4th full paragraph; page 4, 1st full paragraph; page 7, 1st and 3rd full paragraph; page 7, last full paragraph – page 8) and adjusts the gap between the rollers as a function of this measurement. The signal providing the diameter measurement controls the radius as a function of the position of the radiused section in the machine direction.

Conclusion

All claims are rejected.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. 6,362,020 to Shimoda et al. discloses an analogous method (Figures 7 and 9).

U.S. 5,975,745 to Oishi et al. discloses a method for measuring the curl in a web.

U.S. 6,820,671 to Calvert discloses the know equivalence between belts and rollers (col. 4, line 62-col. 5, line 2)

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JW

Jeff Wollschlager
Examiner
Art Unit 1732

December 18, 2006


CHRISTINA JOHNSON
SUPERVISORY PATENT EXAMINER

12/12/06